

### AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning at page 1, line 8 of the specification as follows:

--The present invention relates to a novel method for treating a patient that has osteoporosis and the patient may be having administered cyclase activating parathyroid hormone (CAP) or analogues. The patient receives an administration of a cyclase inhibiting parathyroid hormone peptide (CIP) having an amino acid sequence from between (SEQ ID ~~NO:1~~ [PTH<sub>2-84</sub>]) and (SEQ ID ~~NO:3~~ ~~NO:2~~ [PTH<sub>34-84</sub>]) (*i.e.*, a contiguous portion of PTH having an amino acid sequence set forth in SEQ ID NO:5 (PTH<sub>1-84</sub>), having the N-terminal amino acid residue starting at any position spanning from position 2 through position 34 of the PTH<sub>1-84</sub>, and the C-terminal amino acid residue ending at position 84 of the PTH<sub>1-84</sub>), (preferably (SEQ ID ~~NO:2~~ ~~NO:3~~ [PTH<sub>3-84</sub>]) and (SEQ ID ~~NO:8~~ ~~NO:4~~ [PTH<sub>28-84</sub>])), or a conservatively substituted variant thereof exhibiting parathyroid hormone (PTH) antagonist activity in a therapeutically effective, but non-toxic amount that reduces the occurrence of hypercalcemia or osteosarcoma in the patient resulting from the administration of CAP, and yet, through a CAP rebound effect, is effective in itself in the treatment of osteoporosis.--

Please amend the paragraph beginning at page 2, line 2 of the specification as follows:

--The complete or whole form of human PTH, (hPTH), is a unique 84 amino acid peptide (SEQ ID NO:~~[[.]]~~ 5), as is shown in FIGURE 1. Researchers have found that this peptide has an anabolic effect on bone that involves a domain for protein kinase C activation (amino acid residues 28 to 34) as well as a domain for adenylate cyclase activation (amino acid residues 1 to 7). However, various catabolic forms of clipped or fragmented PTH peptides also are found in circulation, most likely formed by intraglandular or peripheral metabolism. For example, hPTH can be cleaved between amino acids 34 and 35 to produce a (1-34) PTH N-terminal fragment and a (35-84) PTH C-terminal fragment. Likewise, clipping can occur between either amino acids 36 and 37 or 37 and 38. Recently, a large PTH fragment referred to as "non-(1-84) PTH" has been disclosed which is clipped closer to the N-terminal end of PTH. (See R. LePage *et alia*, "A non-(1-84)

*circulating parathyroid hormone (PTH) fragment interferes significantly with intact PTH commercial assay measurements in uremic samples” Clin Chem (1998); 44: 805-810.)*--

Please amend the paragraph beginning at page 4, line 16 of the specification as follows:

--The present invention relates to a novel method for treating a patient that has osteoporosis. The patient may be having administered cyclase activating parathyroid hormone (CAP), commonly referred to simply as PTH, or CAP analogues. The patient receives an administration of a cyclase inhibiting parathyroid hormone peptide (CIP) having an amino acid sequence from between (SEQ ID NO:~~NO:1~~ [PTH<sub>2-84</sub>]) and (SEQ ID NO:~~NO:2~~ [PTH<sub>34-84</sub>]) (i.e., a contiguous portion of PTH having an amino acid sequence set forth in SEQ ID NO:5 (PTH<sub>1-84</sub>), having the N-terminal amino acid residue starting at any position spanning from position 2 through position 34 of the PTH<sub>1-84</sub>, and the C-terminal amino acid residue ending at position 84 of the PTH<sub>1-84</sub>), (preferably (SEQ ID NO:~~NO:2~~ [PTH<sub>3-84</sub>]) and (SEQ ID NO:~~NO:8~~ [PTH<sub>28-84</sub>])), or a conservatively substituted variant thereof exhibiting parathyroid hormone (PTH) antagonist activity in a therapeutically effective, but non-toxic amount that reduces the occurrence of hypercalcemia or osteosarcoma in the patient resulting from the administration of CAP. CIP also has the ability when administered alone to provide a therapeutic treatment for osteoporosis by means of the CAP rebound effect without hypercalcemia or osteosarcoma side effects. Administration can be either continuous or pulsatile, as in the administration of CAP.--

Please amend the Abstract beginning at page 10, line 3 of the specification as follows:

--The present invention relates to a novel method for treating a patient that has osteoporosis and the patient may be having administered cyclase activating parathyroid hormone (CAP) or analogues. The patient receives an administration of a cyclase inhibiting parathyroid hormone peptide (CIP) having an amino acid sequence from between (SEQ ID NO:~~NO:1~~ [PTH<sub>2-84</sub>]) and (SEQ ID NO:~~NO:2~~ [PTH<sub>34-84</sub>]) (i.e., a contiguous portion of PTH having an amino acid sequence set forth in SEQ ID NO:5 (PTH<sub>1-84</sub>), having the N-terminal amino acid residue starting at any position spanning from position 2 through position 34 of the PTH<sub>1-84</sub>, and the C-terminal amino acid residue

ending at position 84 of the PTH<sub>1-84</sub>), (preferably (SEQ ID NO:2~~NO:3~~ [PTH<sub>3-84</sub>]) and (SEQ ID NO:8 ~~NO:4~~ [PTH<sub>28-84</sub>])), or a conservatively substituted variant thereof exhibiting parathyroid hormone (PTH) antagonist activity in a therapeutically effective, but non-toxic amount that reduces the occurrence of hypercalcemia or osteosarcoma in the patient resulting from the administration of CAP, and yet, through a CAP rebound effect, is effective in itself in the treatment of osteoporosis.--